

CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

EVALUATION OF THE CHEMICAL COMPOSITION OF THE PINEAPPLE CULTURE RESIDUE *IN NATURA* OR ENSILED WITH ADDITIVES

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Cultural residues are an alternative feed for the ruminant diet and their ensilage can ensure bulky for the drought period. The objective of this study was to evaluate the chemical composition and *in vitro* dry matter digestibility (IVDMD) of the pineapple culture residue *in natura* and ensiled with additives. Six treatments were arranged in randomized blocks with four replicates: forage *in natura*; silage without additive; silage with corn meal; silage with rice bran; silage with bacterial inoculant (Silobac® - *Lactobacillus plantarum* and *Pediococcus pentosaceus*); and silage with bacterial inoculant (Silobac 5® - *L. plantarum*). For the fermentative evaluations, five treatments (silages only) were used. The forage was harvested, sampled and was ensiled in experimental silos during 75 days. Corn meal and rice bran were added in 100 g kg⁻¹ of fresh matter and the inoculants according to the manufacturer's instructions. The silage with rice bran had a higher dry matter (267.40 g kg⁻¹) (P<0.05) than those containing Silobac®, Silobac 5® and without additive (214,00g kg⁻¹). However, there was no difference (P>0.05) between forage *in natura* (234.30 g kg⁻¹) and silages. The pH of the silage with rice bran was higher (3.7) (P<0.05). In the other silages, the pH was similar (P>0.05), with an average of 3.6. The inclusion of corn meal and rice bran increased NH₃/NT content (50.90 g kg⁻¹) compared to the silages with inoculates and without additive (33.00 g kg⁻¹) (P<0.05). The CP of forage *in natura* (54.80 g kg⁻¹) and silages (56.80 g kg⁻¹) (P>0.05) were similar, except for the one with rice bran (91.50 g kg⁻¹) (P<0.05). The NDF and ADF levels were lower (P<0.05) for corn silage (365.50 and 183.20 g kg⁻¹, respectively). In the forage *in natura*, the contents of NDF and ADF were 483.33 g kg⁻¹ and 194.10 g kg⁻¹, respectively, similar to the other silages. The IVDMD of the forage *in natura* was 746.80 g kg⁻¹ and the silage without additives was 683.40 g kg⁻¹, with a reduction (P<0.05) with ensiling. The IVDMD of the forage *in natura* was 746.80 g kg⁻¹ and the silage without additives was 683.40 (P<0.05). Silage with corn meal showed similar IVDMD to forage *in natura* (751.00 g kg⁻¹) (P>0.05) and silages with rice bran and inoculants (P>0.05) presented values similar to silage without additives (683.60 g kg⁻¹). The residue of pineapple culture *in natura* and ensiled presents fermentative parameters and IVDMD suitable for use for ruminants.

Keywords: *Ananas comosus*, by-products, fermentation, *in vitro* digestibility, ruminants

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